

The Automobile Speaks

It tells you what it is, what it requires and it asks to be treated fairly.

By Frederick C. Guerrich.

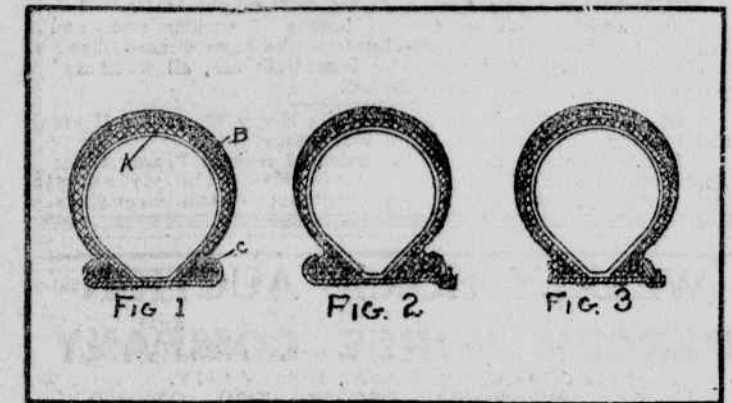
NO. 39—TIRES.

The tires of pleasure automobiles of to-day are almost without exception of "double tube" pneumatic type. The old single tube has been entirely abandoned, while the solid rubber tires are only used on trucks and slow going and heavy electric pleasure cars.

The present day tire consists of two members—the tube, which is airtight and into which the air is pumped, and the casing or shoe, which consists of two parts, namely, the fabric, which is non-elastic and is strong enough to prevent the tube from expanding under its air pressure, and the tread or rubber portion, which serves a twofold purpose; it gives a wearing surface, acts to some extent as a cushion, and is a protection for the fabric.

The "tube" is simply an endless rubber tube equipped with an automatic valve, through which the air can be pumped, and which prevents its escape. It has no strength, and would stretch and even burst if air under a pressure of about one-tenth that required for the complete tire were pumped into it. The resistance to this pressure is entirely furnished by the fabric of the casing.

In addition to a cover to keep out dirt and to help in preventing the escape of the air, the valve cap is a tool for removing and replacing the



"valve insides." Not the notches in the top part of the cap? If this thinner top part is inserted into the valve the notches will grip prongs of the screw of the valve inside and so give a means to unscrew it.

Figure 1 shows a cross section of a typical casing or shoe. A is the fabric. It is in the fabric that the strength of the tire is, and any weakness in it will result in the tube bursting through it. This is what happens when the tire "blows out." B is the rubber or "tread" of tire, the function of which is to give the tire a long wearing and ground gripping surface; also to give a certain amount of cushioning action and a protection for the fabric.

As any defect in the fabric will cause a blowout of the tire care of tires resolves itself into preventing any harm to it. Thus the protecting rubber or tread must be kept free from holes, so that dirt and moisture cannot get at the fabric, and the tire must be kept fairly well inflated, so as to prevent the constant bending of the fabric, which would result from a soft tire. The rims must be kept free of rust and grit or the fabric will quickly wear at the rim, resulting in what is termed a "rim cut." A large proportion of "blowouts" are due to the latter cause.

Tires are made with three types of "beads," which is the portion marked C in figure 1, namely, clincher, quick detachable clincher, and straight side or bead. When a tire is purchased the type must be specified, and owners would do well, therefore, to know the type they require.

Figure 1 shows the plain clincher tire. At first glance this would appear to be the same as the Q. D. clincher, figure 2, but differs in that the bead is soft and can be stretched enough to go over the rim, while the Q. D. clincher has a stiff bead, there being a number of steel cables running through the beads, as shown in figure 2, in many makes.

As the outside of the two tires look almost alike mistakes in their purchase are often made. It is practically impossible to get the stiff bead Q. D. tire over the regular plain clinched rim, while, if the soft bead tire is used on a quick detachable rim, there is a danger of the tube being "pinched" under the bead.

Figure 3 shows the straight side tire. Obviously this could not be used on a clincher rim, nor could the clincher tire be put on its rim.

Inventors and designers have given much thought to making tires as strong as possible and to make them puncture proof. Thus we have the Elberton cord tire, in which cords take the place of the fabric.

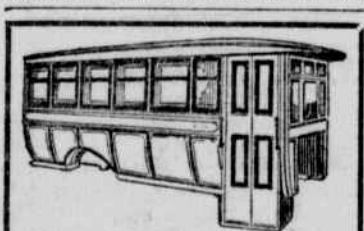
In purchasing a tire it is best to go by reputation or the experience of others, as the eye is a poor guide even to experienced tire men. There must be just the right thickness of rubber over the fabric, too much being as bad, if not worse, than too little. When the rubber is too thick the tire will bend in certain spots only, with a resultant weakening of these spots. It is also well to avoid new makes of tires having heavy anti-skid knobs. It has cost some of the older makers of tires using these knobs a fortune to find the correct proportioning and shape for the knobs, as, because of the bending of the more flexible portion around the knobs, the fabric would crack around them.

The cord tire is coming into use more and more. While its first cost is greater than that for the fabric tire, it will give about twice the mileage, so that it probably is considerably cheaper in the end.

STRONG DEMAND FOR CLOSED CAR MODELS

"The strong tendency of the public toward closed cars for all year use has been abundantly evidenced this year than ever before."

"This fact," said Harry J. DeBear, president and general manager of the Maxwell-Chalmers Distributing Corporation, at Broadway and Fifty-ninth street, "has been clearly demonstrated to us in the strong demand created at the recent Closed Car Show for our new series Good Maxwell sedans and coupes. Each week our closed car sales have been steadily increasing, and the point of interest in the situation is that in nearly every case where a customer trades in an old model car, it is an open type."



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This Garage is absolutely the last word in garage construction, completely fire-proof, equipped with runways that eliminate waiting for elevators. Will conveniently accommodate 500 pleasure and commercial cars; heated throughout, equipped with Curtis Pneumatic Air Compressors and Acme Gas Pumps, which guarantee to give correct measure. Entire plant equipped with duplicate system in case of breakdown. Chauffeurs' rest rooms and lockers on each floor. Light, airy and cheerful. Top floor is devoted entirely to dead storage at \$10 per month. We cordially invite your inspection. Representative will call upon you to quote rates.

MOTORING THROUGH THE SUNNY SOUTH

To Florida by Way of Virginia, the Carolinas and Georgia.

When the birds fly southward thousands of motorists start from the wintery North to the balmy South, well known as "The Land of Perpetual Sunshine." Some start in the early fall and stop over in the Carolinas until after the holidays, then continue on to Florida. Others prefer to stay all winter at some of the resorts midway between New York and Florida, such as Pinehurst, Camden, Aiken, Savannah and Asheville, where the climatic conditions are ideal for all outdoor sports, the thermometer seldom getting below forty, the average temperature being about fifty.

The Bureau of Tours of the Automobile Club of America, 60 M. Wells, chief roadman, recently checked up all the roads through the South and outlines the shortest and best way to reach the Carolinas during the month of December.

From New York cross the most convenient ferry and go south on the Hudson County Boulevard to the Plank road, which is followed to Newark. Go out of Newark by way of Elizabeth Avenue and follow the trunk line through Elizabeth, Rahway and Metuchen to New Brunswick. The Staten Island route can also be used by taking the ferry to Staten Island and again crossing by ferry from the south end of the island at Tottenville to Perth Amboy. Go through Perth Amboy on Smith street, which becomes New Brunswick Avenue, joining the trunk line at Metuchen. From New Brunswick follow the Lincoln Highway through Princeton to Trenton. From Trenton the Bustleton pike is followed through Langhorne and Bustleton, entering Philadelphia by way of the Northeast Boulevard and Broad street to City Hall. From Philadelphia there are two ways to reach Baltimore, both of which are in good condition and about the same mileage. One is to go direct to Wilmington, then through Newark, Haver de Grace and Belair. The other is to follow the Old Baltimore pike through Landow, Kennett Square, Rising Sun and across the Conowingo Bridge over the Susquehanna River to Belair and continue through Baltimore to Washington. From Washington go south on Fourteenth street, cross the Potomac River on a long bridge into Virginia and follow a hard surfaced road through Alexandria and Dumfries to Fredericksburg. The road between Fredericksburg and Richmond is gravel in good condition, excepting a few short stretches.

Richmond is a beautiful city with wide, well paved streets, many of them shaded by fine trees and is now the capital of Virginia. During the war between the States it was the capital of the Confederacy and there are many interesting associations that recall those days. One is to go direct to the construction or are to be constructed as soon as the weather permits and before the summer touring season of 1922 all the trunk lines radiating out of Richmond will be improved hard surfaced. There is also a good hard surfaced road going out of Richmond as far as Petersburg, but beyond the traveling is somewhat rough and apt to be poor in wet weather. From Durham there is a good road, which was recently finished to Raleigh; also a fair road from Raleigh to Pinehurst by way of Cary and Apex and the direct road from Sanford to Pinehurst.

The next place of importance below Pinehurst is Camden, the birthplace of six American generals.

By continuing south from Camden the route goes to Aiken, where there is an exclusive colony of rich Northerners on both financial and social prominence. Twenty miles below Aiken is Augusta, one of Georgia's finest cities. From Augusta there is a fairly good road to Savannah. From Savannah there is a good road through Reeboro to Darien. There is a new bridge across the Altamaha River which eliminates the placing of automobiles on flat cars and crossing the Georgia-Piedmont trestle.

FRANKLIN PROGRESSES RAPIDLY IN NEW YORK

Just a little over ten years ago there arrived on Broadway's Automobile Row a tall stranger, who, after surveying the bright light district, decided that

this was the field he must conquer and that he would launch out into an industry that to him held endless possibilities. With a vision broader than many of the men who had spent years in the auto industry, he decided to go after the agency of an air cooled car, as he felt that type of car would have a strong appeal in the metropolitan district.

With him to think was to act, and it was only two weeks later that the Franklin motor car appeared on Broadway under the sales guidance of Glenn A. Tidale, to-day president of the Franklin Motor Car Company of New York. As the Franklin business grew in New York Mr. Tidale expanded his organization to take care of the ever increasing number of owners, until to-day he occupies one of the largest showrooms on Broadway.

To show how well he conquered this district it is only necessary to state that every year since starting in business here he has shown increased sales over each preceding year, and during the year 1921, which has been exceptionally hard on the auto industry, Franklin sales in the New York district have gone over the top and will close the year with the largest number of sales ever made for the Franklin Company in this district. It is interesting to note that this year the sales will be more than twice as large as the first year he was represented on Auto Row and that he now leads all Franklin dealers in the number of sales.

Despite his arduous duties at the showroom he found time in the meanwhile to take an active interest in the affairs of the Rotary Club, holding the office of president one year and at the present time being a director of the club. He is also a director of the Automobile Dealers' Association. During the last week many friends have dropped in to congratulate Mr. Tidale on his tenth anniversary of the establishment of the Franklin car in the New York district.

WALKER MOTOR MOVES TO LARGER QUARTERS

The rapid growth of Walker Motors, Inc., necessitating a removal to a larger plant at 138th street and Southern Boulevard, may be ascribed to two primary reasons, exceptionally able management and the guarantee of satisfaction that goes with every transaction whether it be the replacement of a small part or the sale of a fleet of rebuilt trucks.

E. W. Walker, president and general manager of Walker Motors, has given to the upbuilding of the business that bears his name the best of his long experience in the motor truck field, and, availing himself of the best of the modern methods of trucking, has produced astonishing results. So well appreciated is the Walker service guarantee and so great the values offered in rebuilt trucks that in ten months the company completely outgrew its former quarters.

Right now Walker Motors are offering standard rebuilt trucks, carrying the standard guarantee, at prices far below those ordinarily quoted for these makes, prices so low that they can be accounted for only by the circumstance that the trucks were bought from banks for cash.

AUTOCAR CO. PRESENTS NEW TWO TON MODEL

The Autocar Company of Ardmore, Pa., has announced a new schedule of prices effective January 3, 1922, for its standard 1½ to 2 ton Autocar and for its 5 ton heavy duty Autocar. It announces also a new model heavy duty two ton Autocar.

The price of the standard 1½ to 2 ton Autocar with its overall capacity of 11,000 pounds will be reduced from \$2,300 and \$2,400 to \$1,950 for the 97 inch wheelbase and \$2,050 for the 120 inch wheelbase.

The 5 ton heavy duty Autocar with its overall capacity of 22,000 pounds will be priced at \$3,950 for the 120 inch wheelbase and \$4,100 for the 126 inch wheelbase.

WOMEN IN ENDURANCE TEST.

A test of the endurance of women as automobile drivers is the principal purpose of members of this winter's tour of the Scarborough Motor Guide, who arrived in New York yesterday evening. The tour is an annual event under the direction of the "Green Book" and comprises this year thirty motor cars, carrying nearly two hundred tourists, and practically all driven by women. Under the leadership of J. P. Roccomora, president of the tour, the party is motoring from various New England points to Miami, Fla., and return.

The Automobile Owners' Obligation

Be Fair to the Manufacturer and Dealer by Being Fair to Your Car

The writer recently saw a "comic" in some paper in which a man was shown carefully dusting his new car and worrying because there was a speck of dirt on it. Then there was a blank left to indicate the flight of time, and then the final picture. Here the same man was shown in a car covered with dirt and mud, while a bystander said: "Master, your car looks awful," to which the man replied: "I don't care as long as it runs."

There was as much truth as comedy pictured in this comic. That man, when his car was new, was also extremely careful to fill his grease cups regularly, to keep his radiator filled, and, in short, to do all he could to keep his car in good condition. Unfortunately, when he became careless about the mechanical parts of it, and now seldom fills his grease cups, and is contented as long as the car runs.

It was a spring, or steering mechanism bolt broke because of his neglect, and not because of a defect, he would probably be quite indignant. Mr. Reader, are you this man? Are you the man who was pictured as above? The writer must admit that the comic made him feel a little guilty himself.

Whenever there is a grease cup on your car there are rubbing parts, and where there is rubbing, there will be wear unless a lubricant is used. A pin two inches in diameter is not a pin, but a pin one inch in diameter is about eight times as strong, the strength being proportional to the cube. Thus you can see how greatly the strength of the various bolts is decreased by a small amount of wear.

Failure to use the grease cups regularly means that annoying rattles and that dis-

While you may sometimes feel that about twenty-nine of the horses are dead in your 30-horse power machine, nevertheless that machine will do as much work for you as 30 horses could. It will carry you 200 miles a day; it will take you further in five minutes than a horse will in half an hour, without counting the time taken to harness. So why not give a little of the time required for harnessing one horse to the lubricating of the equivalent of thirty horses?

The Starting and Lighting System. While the starting and lighting system is automatic and requires little attention, it is electrically operated, which means that by incorrect use it will quickly go wrong. It is rubbing, there will be wear unless a lubricant is used. A pin two inches in diameter is not a pin, but a pin one inch in diameter is about eight times as strong, the strength being proportional to the cube. Thus you can see how greatly the strength of the various bolts is decreased by a small amount of wear.

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Special outfits for the following cars ready to attach:

Ford Model-T Six Buick Big Six Buick Little Six Buick Light Four Buick Big Six Buick Little Six Buick Light Four Buick Big Six Buick Little Six Buick Light Four

Liberal allowances on old carburetors

OLDEST AMERICAN CAR WANTED AT AUTO SHOW

Who owns and where is the oldest automobile of standard American make still in running condition?

That's what the management of the National Automobile Shows in Grand Central Palace, January 7 to 14, and the Coliseum, Chicago, January 23 to February 4, wants to know, and it would like to hear from persons who believe they are entitled to the honor of such ownership.

Candidates are required to send details of the make of car, the year of manufacture, the manufacturer's number if possible, an estimate of the number of miles the car has run, what changes it has had, and a photograph of the car, to S. A. Miles, general manager, National Automobile Shows, 366 Madison Avenue, New York City, on or before January 9, 1922.

THE BUICK MOTOR COMPANY

Offers at the Season's Lowest Prices

Nine 1922 Buick Demonstrating Cars

Guaranteed for One Year

BUICK MOTOR COMPANY

Broadway and 55th St.

OAKLAND WILL BE EXPANDED BY DU PONT

The recent statement of P. S. du Pont, president of the General Motors Corporation, regarding the Oakland division of the General Motors definitely settles rumors concerning the attitude of General Motors toward this division. The statement indicates that the Oakland Motor Car Company will be developed and expanded to its full possibilities, along with the other units of General Motors. This statement also indicates that the present models, with continued improvements and refinements, will be produced during the present selling season.

Mr. du Pont's statement in full is as follows: "It is but natural that there should have been constant gossip during the last few weeks while automobile price revisions were under way. The policies of General Motors Corporation with respect to certain of its manufacturing divisions were not immune, the future of Oakland being the subject of persistent rumors."

"This division is in a healthy condition, with its business stabilized and sales increasing. The present line of passenger cars, with gradual improvements, will be continued for the 1922 selling season. Thereafter new models as may be required by the trade may be introduced."

NEW ELECTRIC AUTO HAS 60 MILE RADIUS

The appearance in this city recently of a small, high quality electric automobile suggests a new chapter in the world of transportation. This latest thing in the electric vehicle world has been developed to meet a demand for a handy automobile which can be maintained at low cost.

This small car, known as the automatic electric, has a capacity for two passengers and a cruising radius of from fifty to sixty miles on one charge of electricity at a speed of from fifteen to eighteen miles an hour. As may be seen, it is not a big car's competitor. The wheel base is sixty-five inches, tread thirty-five inches. These cars may be parked in a space four feet by eight feet.

George O. Walton, head of the New York distributing company, in discussing the new automatic electric had the following to say: "The manufacturers of electric vehicles have for a number of years been endeavoring to develop just such a car as our new electric. It remained for the Automatic Transportation Company of Buffalo, N. Y., to accomplish the seemingly impossible, for our new electric has been subjected to the most exacting tests and have made good in every detail."

REPUBLIC RAPID TRANSIT

A Truck that Gives Unequaled Service at Lowest Cost

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J. A. Allen, Mch. Connery Top Express. Completely Equipped

Unequaled Service

Lowest Prices in America

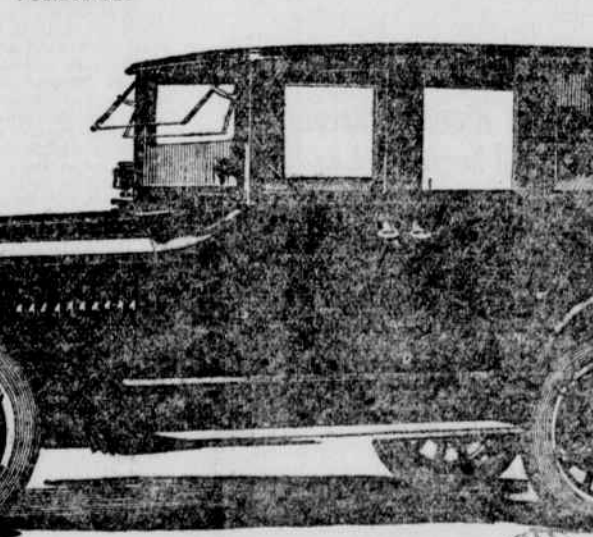
Republic-Crabtree Corporation,
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Republic has more trucks in use than any other exclusive truck manufacturer

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Suppose you come in and see this car today. Then, if you wish it, we'll be glad to cooperate to the limit in placing it at your front door early Christmas morning where all the family will see it through the window holly. Terms can be arranged to suit your convenience.



Studebaker

A Partial List of Appointments

Unusually deep upholstery of gray mohair velvet plush; adjustable silk shades to match; cut glass dome light; frosted nickel trimmings; glove pockets at sides of rear seat; jeweled 8-day clock; magnetic speedometer on above-detailed instrument board; collapsible steering wheel; exhaust heater; massive headlights; artistic coach lamps; three piece rain-vision windshield; windshield wiper; adjustable ventilator in cowl.

MODELS AND PRICES

f. o. b. factories

Coupees and Sedans	Touring Cars and Roadsters
Light-Six 2-Pass. Coupe-Rd. \$1550	Light-Six 3-Pass. Rd. \$1125
Light-Six 5-Pass. Sedan 1850	Light-Six Touring Car 1150
Special-Six 4-Pass. Coupe 2450	Special-Six 2-Pass. Rd. 1585
Special-Six 5-Pass. Sedan 2550	Special-Six Touring Car 1635
Big-Six 4-Pass. Coupe 2850	Special-Six 4-Pass. Rd. 1635
Big-Six 7-Pass. Sedan 2950	Big-Six Touring Car 1965

All Studebaker Cars are Equipped with Cord Tires

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"We warrant every motor car we sell to be a complete and perfect machine, and we will refund the purchase price of any motor car that is not a complete and perfect machine when delivered to the owner. This guarantee is in addition to the standard guarantee of the manufacturer and is not subject to any conditions or limitations. It is the policy of the Oakland Motor Car Company to sell only the best of motor cars, and we will stand behind every car we sell." — J. P. Roccomora, President

Counter-Signed: J. P. Roccomora, President

Authorized Oakland Motor Car Company

LOCAL DEALER

These Oakland Features Make Possible The Special Guarantee

The new and remarkable features embodied in the Oakland engine—features which have made possible the sweeping Oakland guarantee—are causing considerable comment throughout the automotive industry.

Oakland's special design and construction of cylinders, pistons and piston rings have supplied the much-sought-for means of eliminating an annoying trouble familiar to drivers of motor cars—"oil pumping."

Just how fully Oakland engineers have solved this problem for motorists—particularly in these times of low grade fuels and oils—is best proven by the terms of the Oakland 15,000 mile written guarantee against "oil pumping."

Read this unusual guarantee—when you come in to inspect the five attractive models on exhibition.

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Phone Circle 4880. Wholesale—Retail
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Division of General Motors Corporation

